



Tessellation 20

Suite: Tessellation Party!

by Arya Akhavan (November 2012)

Angles for R.I. = 1.540

44 + 12 girdles = 56 facets

4-fold, mirror-image symmetry

96 index

L/W = 1.000

P/W = 0.462 C/W = 0.192

Vol./W³ = 0.227

PAVILION

P1	43.12°	96-24-48-72	Cut to centerpoint.
P2	42.16°	05-19-29-43- 53-67-77-91	Meet at culet.
G1	90.00°	96-24-48-72	Set stone size.
G2	90.00°	05-19-29-43- 53-67-77-91	Level girdle.
P3	42.00°	02-22-26-46- 50-70-74-94	Meet P1, P2, G1, G2

CROWN

C1	32.98°	96-24-48-72	Set girdle width.
C2	31.88°	05-19-29-43- 53-67-77-91	Level girdle.
C3	30.19°	04-20-28-44- 52-68-76-92	Meet G1, G2, C1, C2
C4	12.00°	12-36-60-84	Meet C1, C3; C2, C3

I was stuck in MSP overnight, from 8PM to 6:30 AM, and had nothing better to do than watch anime and write interesting faceting patterns. This is an extremely easy design to cut, with a fast pavilion and a simple crown, and the apex not only makes it easier but gives it surprisingly good tilt performance. Works in materials from quartz to rutile (RI = 1.54 - 2.62) with no changes, but I like it best in yellow zircon or smaller sapphires.

C:\Users\ARYADE~1\Pictures\Gems\DESIGN~1\WORKSI~1\Fixed\TECE3A~1.GEM